Abstract of the Disclosure

A method is proposed for braking a synchronous machine 1, with the armature windings (u, v, w) of the synchronous machine 1 being short-circuited, optionally by interposing at least one braking resistor. In order to keep the braking moment constant over virtually the entire speed range it is proposed that the short-circuit current is regulated by a pulse-width modulation depending on the difference between the setpoint value of the short-circuit current corresponding to the setpoint value of the braking moment and the actual value of the short-circuit current.

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(Fig. 1)